

Supplemental Table 1. PRISMA 2009 Guidelines

| Section/topic | Checklist item | Reported on page # |
|---------------------------|---|------------------------------------|
| Title | | |
| Title | Identify the report as a systematic review, meta-analysis, or both. | Page 1 |
| Abstract | | |
| Structured summary | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number. | Page 2 |
| Introduction | | |
| Rationale | Describe the rationale for the review in the context of what is already known. | Pages 4 & 6 |
| Objectives | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | Pages 7-8 |
| Methods | | |
| Protocol and registration | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. | Pre-registration was not obtained. |
| Eligibility criteria | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. | Pages 9-11 |
| Information sources | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. | Page 9 |
| Search | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | Supplemental Table 2 |
| Study selection | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis). | Pages 10-11 |
| Data collection process | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. | Page 12 |
| Data items | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | Page 12, Supplemental Table 3 |

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| Risk of bias in individual studies | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. | Page 12, 24 |
| Summary measures | State the principal summary measures (e.g., risk ratio, difference in means). | Page 12 |
| Synthesis of results | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I ²) for each meta-analysis. | Pages 13-14 |
| Risk of bias across studies | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). | Page 13 |
| Additional analyses | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. | Page 13 |
| Results | | |
| Study selection | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. | Pages 10-11, Figure 1 |
| Study characteristics | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. | Supplemental Table 4 |
| Risk of bias within studies | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). | Supplemental Table 4 |
| Results of individual studies | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. | Figure 2 |
| Synthesis of results | Present results of each meta-analysis done, including confidence intervals and measures of consistency. | Page 15, Pages 18-19, Table 1 |
| Risk of bias across studies | Present results of any assessment of risk of bias across studies (see Item 15). | Page 15, Pages 18-19 |
| Additional analysis | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). | Pages 16-17 |
| Discussion | | |
| Summary of evidence | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). | Pages 19-22 |

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| Limitations | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). | Pages 22-24 |
| Conclusions | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | Pages 25-26 |
| Funding | | |
| Funding | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | No funding to report |

Supplemental Table 2. List of search terms

Search terms used

- “Therapist OR provider OR clinician OR counselor OR psychologist OR mental health professional OR psychiatrist”
 - “paraprofessional OR layperson”
 - “experience OR training”
 - “client OR patient OR participant” “symptom OR outcome”
 - “internalizing OR depression OR anxiety”
 - “withdrawal OR worry OR sadness OR irritability OR nervousness OR fear OR neuroticism”
 - Wildcard terms were used to allow for results to include all possible versions of a word (e.g., using depress* to include “depression,” “depressive,” and “depressed”)
 - In addition, “NOT” statements were used to exclude inappropriate articles (e.g., “NOT speech therapist” when searching for “therapist”)
 - Disorder terms, including:
 - “Specific Phobia”
 - “Social Phobia”
 - “Social Anxiety Disorder”
 - “Generalized Anxiety Disorder”
 - “Panic Disorder”
 - “Posttraumatic Stress Disorder”
 - “Obsessive-Compulsive Disorder”
 - “Separation Anxiety Disorder”
 - “Depression”
 - “Major Depressive Disorder”
 - “Dysthymia”
 - “Persistent Depressive Disorder”
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Note. Searches completed in June-August 2016 and December 2017-January 2018.

Supplemental Table 3. Moderator codes, categories, and definitions

| Moderator Code | Category | Definition |
|----------------------------|------------------------------|--|
| Treatment approach | Cognitive Behavioral Therapy | Study therapists delivered CT, BT, CBT, or any brand-name CT/BT/CBT treatments (e.g., Coping Cat, ERP), or are described as using techniques considered consistent with this treatment modality (e.g., behavioral activation, exposures, cognitive restructuring). |
| | Non-CBT Treatment | Study therapists delivered any non-CBT treatment, including psychodynamic, analytical, experiential, IPT, client-centered, nondirective, humanistic, family, eclectic, or other therapies. |
| Client age | All adults | All clients were adults/young adults/college students, or all clients were > 18 years of age. |
| | All youth | All clients were youth/children/adolescents, or all clients were <18 years of age. |
| Client diagnostic category | Primary anxiety disorder | Client sample is diagnosed with, or has problems/symptoms consistent with any of the following anxiety diagnoses: OC Spectrum Disorders, Posttraumatic Stress Disorder, Generalized Anxiety Disorder, Separation Anxiety Disorder, Selective Mutism, Social Phobia, Panic Disorder, Specific Phobias (e.g., snakes, heights), and/or Adjustment Disorder (i.e., with anxiety). |
| | Primary depressive disorder | Client sample is diagnosed with, or has problem/symptoms consistent with any of the following depressive diagnoses: Depressive disorders (e.g., Persistent Depressive Disorder, Major Depressive Disorder), and/or Adjustment Disorder (i.e., with depressed mood). |
| | Mixed internalizing disorder | Client sample is diagnosed with, or has problem/symptoms consistent with a variety of the internalizing disorders AND there is not information given on results that separate anxious and depressed client outcomes. |
| Comorbidity | Comorbidity allowed | Client sample is described as having any comorbid disorders. Any type of comorbid psychological disorders are acceptable to count towards this code, including comorbid anxiety disorders and depressive disorders. |

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| | Comorbidity not allowed/Unknown | Clients with comorbidities were not allowed into the study and/or no information was given regarding any secondary/comorbid diagnoses study clients are diagnosed with. |
| Supervision | Equal supervision | All therapists received equivalent supervision, regardless of experience level. |
| | Less experienced therapists received more supervision | Therapists with less experience (e.g., students) received more supervision than more experienced therapists. |
| Randomization | Randomized clients to therapists | Clients were randomly assigned to therapists. Randomization can be strictly done (i.e., similar to that done in RCTs), or more casually (e.g., therapist gets whatever client is next on the waitlist). |
| | No randomization/Unknown | Clients were not randomized to therapists (e.g., more experienced clinicians will get more severely impaired clients). If study did analyses and found the groups to be equivalent in pre-treatment symptoms, was considered to be appropriate for this code. Also included studies with no information regarding client randomization. |
| Treatment manualization | Treatment manualized | Treatment was based off an established treatment program, often needing some formal training/practice and therapy protocol, manual, or book to guide the therapists. Formalized fidelity checks were not necessary to receive this code. |
| | Treatment not manualized/Unknown | This code could represent several things, including: therapists who could deliver any treatment; therapists delivering a treatment but with no subscribed session length, session content, or order; studies including two different types of treatment, one manualized and one not; and studies with no information about treatment beyond a general theoretical orientation. |
| Definition of therapist experience | Professionals versus paraprofessionals (Broad Definition) | Included studies comparing “professionals,” generally master’s level clinicians or higher, with “paraprofessionals,” most commonly college students or lay persons with no experience delivering therapy. |
| | General clinical experience (Broad Definition) | Included studies measuring experience as days, months, or years conducting therapy, without information about work with a specific client population or treatment manual. |

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| Degree/schooling level (Broad Definition) | Included studies comparing therapists at different degree levels (at least 3), most commonly undergraduate, master's-, and doctoral-level clinicians. |
| Experience with specific client population (Specific Definition) | Included studies measuring experience with a client population (e.g., anxiety disorders, OCD). Experience could be measured either in number of clients served, or in length of time working with the population (e.g., months in a specialized practicum). |
| Experience with specific treatment (Specific Definition) | Included studies measuring experience with a treatment (e.g., Coping Cat, ERP). Experience could be measured either in number of times treatment used, or in length of time using the treatment (e.g., months in a specialized practicum). |
| Professionals versus trainees (Broad Definition) | Included studies comparing "professionals," generally master's level clinicians or higher, with "trainees," most commonly predoctoral psychology trainees. |

Note. CT=Cognitive Therapy, BT=Behavioral Therapy, CBT= Cognitive Behavioral Therapy, ERP=Exposure and Response Prevention, IPT=Interpersonal Therapy.

Supplemental Table 4. Included studies, therapist experience definition, sample size, and moderator category

| Authors | Year | Subgroup used in analyses | Experience definition category | # Clients (# Therapists) | Age group | Disorder group | Treatment Approach | Comorbidity allowed | Therapist supervision | Randomization | Treatment Manualization | Outcome Domain | Outcome Rater |
|--|------|--|--|--------------------------|-----------|----------------|---|---------------------|-----------------------|---------------|-------------------------|--|----------------|
| Andersson, Calbring, Furmark, & SOFIE Research Group | 2012 | Licensed psychologists versus advanced student trainees | Professional versus Trainee (Broad) | 102(13) | Adult | Anxiety | CBT | No/Unknown | Unequal | Yes | Yes | •Anxiety •Depression •Functioning | •Client |
| Baker & Neimeyer ¹ | 2003 | Professionals (Master's level or higher) versus paraprofessionals | Professional versus Paraprofessional (Broad) | 98 (14) [‡] | Adult | Depression | Other (Combination of CBT and Supportive) | Yes | Equal | No | No/Unknown | •Depression | •Client •IE |
| Bright, Baker, & Neimeyer (CBT arm) ¹ | 1999 | Professionals (Master's level or higher) versus paraprofessionals | Professional vs Paraprofessional (Broad) | 31(14) [‡] | Adult | Depression | CBT | Yes | Equal | No | Yes | •Depression •Functioning •Other | •Client •IE |
| Bright, Baker, & Neimeyer (MSG arm) ¹ | 1999 | Professionals (Master's level or higher) versus paraprofessionals | Professional vs Paraprofessional (Broad) | 36(14) [‡] | Adult | Depression | Other (Supportive) | Yes | Equal | No | No/Unknown | •Depression •Functioning •Other | •Client •IE |
| Bisbey (TIR arm) | 1995 | Therapists with more or less experience with TIR | Experience with specific treatment (Specific) | 19(4) [‡] | Adult | Anxiety | CBT | No/Unknown | Equal | Unknown | Yes | •Anxiety | •Client |
| Bisbey (DTE arm) | 1995 | Therapists with more or less experience with TIR | Experience with specific treatment (Specific) | 19(4) [‡] | Adult | Anxiety | CBT | No/Unknown | Equal | Unknown | Yes | •Anxiety | •Client |
| Franklin, Abramowitz, Furr, Kalsy, & Riggs | 2003 | High experience versus Medium experience High experience versus Low experience Medium experience versus Low experience | Experience with specific treatment (Specific) | 86(30) | Adult | Anxiety | CBT | Yes | Unequal | No | Yes | •Anxiety •Depression | •IE |
| Howard | 1999 | Specialist versus nonspecialists | Experience with specific treatment (Specific) | 165(47) | Adult | Anxiety | CBT | No/Unknown | Unknown | No | No/Unknown | •Anxiety •Depression •Functioning •Other •Combination of internalizing/externalizing | •IE •Other |
| Huppert, Bufka, Barlow, Gorman, Shear, & Woods | 2001 | Years conducting CBT Years conducting general psychotherapy | Experience with specific treatment (Specific) General clinical experience (Broad) | 183(14) | Adult | Anxiety | CBT | No/Unknown | Equal | No | Yes | •Anxiety •Depression •Internalizing | •Client •IE |

RUNNING HEAD: THERAPIST EXPERIENCE AND INTERNALIZING OUTCOMES

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| Konuk, Knipe, Eke, Yuksek, Yurtsever, & Ostep | 2006 | Years conducting clinical work | General clinical experience -split into less versus more experienced groups (Broad) | 41(5) | Adult | Anxiety | CBT (EMDR) | No/Unknown | Equal | No | Yes | •Anxiety | •Client |
| Lewis | 2011 | Months conducting therapy | General clinical experience (Broad) | 222(33) | Adult | Internalizing Disorders | CBT | Yes | Unequal | No | No/Unknown | •Anxiety •Depression | •Client |
| McLean & Hakstian | 1979 | Years conducting general psychotherapy | General clinical experience (Broad) | 129(4) | Adult | Depression | Other (Multiple treatment modalities) | No/Unknown | Equal | Yes | No/Unknown | •Internalizing | •Client |
| Nyman, Nafziger, & Smith | 2010 | Professional versus Pre-doctoral intern | Degree/Schooling levels (Broad) | 264(32) | Adult | Internalizing Disorders | Other (Multiple treatment modalities) | No/Unknown | Unequal | Unknown | No/Unknown | •Anxiety •Depression •Internalizing •Functioning | •Client |
| Piacentini, Bergman, Jacobs, McCracken, & Kretchman | 2002 | Experienced CBT therapists versus trainees | Experience with specific treatment (Specific) | 42(Unknown) | Youth | Anxiety | CBT | No/Unknown | Unequal | Unknown | Yes | •Anxiety •Functioning | •IE |
| Podell | 2010 | Number of anxious clients seen | Experience with client population (Specific) | 279(38) | Youth | Anxiety | CBT | Yes | Equal | Yes | Yes | •Anxiety •Functioning | •Client •IE •Parent |
| Propst, Paris, & Rosberger | 1994 | Psychiatrist versus Psychiatry Resident | Degree/Schooling levels (Broad) | 42(Unknown) | Adult | Internalizing Disorders | Psychodynamic | Yes | Unequal | Yes | No/Unknown | •Functioning •Satisfaction •Other •Combination of internalizing/externalizing | •Client •IE |
| Russell & Wise (Systematic Desensitization arm) | 1976 | Experienced versus paraprofessionals | Professional versus paraprofessional (Broad) | 35(6) ^y | Adult | Anxiety | CBT | No/Unknown | Equal | No | Yes | •Anxiety | •Client |

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| Russell & Wise (Cue-Controlled Relaxation arm) | 1976 | Experienced versus paraprofessionals | Professional versus paraprofessional (Broad) | 35(6) [‡] | Adult | Anxiety | CBT | No/Unknown | Equal | No | Yes | •Anxiety | •Client |
| Stanley et al.; Kraus-Schuman et al.; Freshour et al. [€] | 2014, 2015, 2016 | Professionals (PhD level) versus paraprofessionals | Professional versus paraprofessional (Broad) | 150(10) | Adult | Anxiety | CBT | Yes | Equal | Yes | Yes | •Depression •Anxiety •Functioning •Satisfaction •Other | •Client •IE •Other |
| Thirlwall, Cooper, Karalus, Voysey, Willettts, & Creswell (Brief CBT arm) | 2013 | Some clinical experience versus Novices | Professional versus paraprofessional (Broad) | 61(19) [‡] | Youth | Anxiety | CBT (Brief) | Yes | Equal | No | Yes | •Anxiety | •IE |
| Thirlwall, Cooper, Karalus, Voysey, Willettts, & Creswell (Full CBT arm) | 2013 | Some clinical experience versus Novices | Professional versus paraprofessional (Broad) | 64(19) [‡] | Youth | Anxiety | CBT (Full) | Yes | Equal | No | Yes | •Anxiety | •IE |
| Thompson, Gallagher, Nies, & Epstein | 1983 | Professional versus paraprofessional | Professional versus paraprofessional (Broad) | 56(16) | Adult | Depression | CBT | No/Unknown | Unknown | Unknown | Yes | •Depression •Functioning •Satisfaction •Other | •IE •Other |
| van Oppen, van Balkom, Smit, Schurmans, van Dyck, & Emmelkamp | 2010 | Professional versus Master's clinical psychology trainees | Professional versus trainees (Broad) | 118(19) | Adult | Anxiety | CBT | Yes | Equal | Yes | Yes | •Anxiety •Depression •Other | • Client • IE • Other |
| Vosciano et al. | 2004 | Years conducting therapy | General clinical experience (Broad) | 173(48) | Adult | Depression | CBT (CBASP) | No/Unknown | Unequal | Yes | Yes | •Depression | •IE |

Note. CBT=cognitive behavioral therapy, MSG=Mutual support group, TIR=Traumatic Incident Reduction, DTE=Direct Therapeutic Exposure, EMDR=Eye Movement Desensitization and Reprocessing, CBASP=Cognitive Behavioral Analysis System of Psychotherapy.

[‡]Data in both studies are from the same randomized control trial.

[‡]Same group of therapists delivered both arms of treatment. Number of therapists counted once towards total sample size.

[€]All articles reported on data from the same sample.